

## **Project Scope:**

Replace existing potable water delivery system. System consists of valves, ~2800' 3.5" line or smaller, 3 hydrants and ties to 44 residential customers.

## **Time Line:**

1. Engineered Plans
2. Bids
3. Permits
4. Work – Schedule during late fall to minimize water service disruption.
  - Stage 1: Fall 2011 - Replace ~300' Line from Tank Valve, 2 Branch Valves in Street Intersection of Scott and West, to end past the 3<sup>rd</sup> lot on West St. (short 1 lot of Terrace)
  - Stage 2: Fall 2012 – Replace ~2500' of line, hydrants and customer ties on both branches.

## **Owner Information**

System Ownership: Mutual Water Co..  
(each property owner has a share in the water co.)

Construction Financing Plan: Assessment and Loan Combo.

### **Construction Schedule:**

1. Oct. 2011 – Repair ~300' of most problematic section (Tank-West St.)
2. Fall 2012 - Replace remaining ~2500' of line/valves/hydrants
3. TBD – Replace Tank w/33,000 gal as per Fourcroy Engineering (Summer 2010)

## **System Information**

1. Gravity feed system
2. System built ~ 1953
3. Existing pipe - ~ 3.5 " dia with wall thickness ~.125" seamed steel (surplus steamfitting pipe from Mare Island)

4. 44 connections presently (only 3 lots remain)
5. System Drawings - see attachment
6. Fire protection water:
  - 3 hydrants with poor gpm
  - top hydrant <20 psi
  - Looking to meet ISO 8b rating – 250 gal/min for 20 minutes – 30,000 gallons
7. Water tested monthly by FGL for bacteria.
8. Is the water chlorinated - No
9. No meters at each connection
10. Past data available regarding water usage? (Max day, peak hour, etc.?)
  - Data is spotty -
  - Max Usage occurs on Memorial, July 4<sup>th</sup>, and Labor weekends.
11. Well/Pump/Controls
  - Well Depth: 325'
  - Pump Depth: 150'
  - Casing Diameter: ?
  - Well Capacity – 25 gpm
  - 3 hp Pump (single phase)
  - Variable speed drive? – No
12. 25,000 gal. Storage Tank at Present. Planned Replacement – 33,000 gal.

**Past Problems:**

13. Low pressure at top of Scott Drive : ~ 10psi
14. Some sand in the lines
15. Bacteria & chemical problems have been almost non-existent
16. Bacteria once when tank overflowed.
17. Pipe/system leaks:
  - increasing incidence last 3 years
  - Replacement/Repairs this Spring/Summer show extreme electrolysis corrosion.